

(FILE 'HOME' ENTERED AT 14:49:09 ON 30 JUN 2006)

FILE 'REGISTRY' ENTERED AT 14:49:22 ON 30 JUN 2006

L1 2 S ANISIC ACID/CN  
L2 1 S TOLUIC ACID/CN

FILE 'CAPLUS' ENTERED AT 14:50:46 ON 30 JUN 2006

FILE 'CAPLUS' ENTERED AT 14:51:09 ON 30 JUN 2006

L3 16 S 1335-08-6/PREP  
L4 15 S 1335-08-6/PROC  
L5 199 S 100-09-4/PROC  
L6 514 S 100-09-4/PREP  
L7 0 S 25567-10-6100-09-4/PREP  
L8 46 S 25567-10-6/PREP  
L9 36 S 25567-10-6/PROC  
L10 797 S L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9  
0 S L10 AND PALLADIUM AND (HETEROPOLYACID OR OXO ACID )  
L12 48 S L10 AND PALLADIUM  
L13 1 S L12 AND (HETEROPOLY?)  
L14 5 S L12 AND OXYGEN AND CO  
L15 4 S L14 AND PY<2003

=>

```
=> s anisic acid/cn
L1          2 ANISIC ACID/CN
```

```
=> d
```

```
L1  ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2006 ACS on STN
RN  1335-08-6  REGISTRY
ED  Entered STN: 16 Nov 1984
CN  Benzoic acid, methoxy- (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  Anisic acid (8CI)
OTHER NAMES:
CN  Methoxybenzoic acid
MF  C8 H8 O3
CI  IDS, COM
LC  STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT,
     CBNB, CHEMCATS, CHEMLIST, CIN, CSChem, EMBASE, IFICDB, IFIPAT, IFIUDB,
     NAPRALERT, PROMT, TOXCENTER, USPATFULL
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
```



D1—O—Me

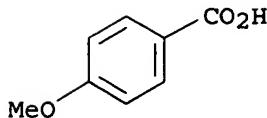
D1—CO<sub>2</sub>H

153 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
153 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> d 2
```

```
L1  ANSWER 2 OF 2  REGISTRY  COPYRIGHT 2006 ACS on STN
RN  100-09-4  REGISTRY
ED  Entered STN: 16 Nov 1984
CN  Benzoic acid, 4-methoxy- (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  p-Anisic acid (6CI, 7CI, 8CI)
OTHER NAMES:
CN  4-Anisic acid
CN  4-Methoxybenzoic acid
CN  Anisic acid
CN  Draconic acid
CN  NSC 32742
CN  NSC 7926
CN  p-Methoxybenzoic acid
FS  3D CONCORD
MF  C8 H8 O3
CI  COM
LC  STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
     CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSChem, DDFU,
     DETHERM*, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
     MRCK*, MSDS-OHS, NAPRALERT, PIRA, RTECS*, SPECINFO, TOXCENTER, ULIDAT,
```

USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3264 REFERENCES IN FILE CA (1907 TO DATE)  
83 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
3269 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s toluic acid/cn  
L2 1 TOLUIC ACID/CN

=> d

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 25567-10-6 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Benzoic acid, methyl- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Toluic acid (8CI)  
OTHER NAMES:  
CN ar-Toluic acid  
CN Methylbenzoic acid  
MF C8 H8 O2  
CI IDS, COM  
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT,  
CHEMLIST, CIN, CSNB, DETHERM\*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,  
ENCOMPPAT2, IFICDB, IFIPAT, IFIUDB, PROMT, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



D1—Me

D1—CO<sub>2</sub>H

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

336 REFERENCES IN FILE CA (1907 TO DATE)  
35 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
336 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 1-4 ibib abs hitstr

L15 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1996:737885 CAPLUS  
DOCUMENT NUMBER: 126:7825  
TITLE: Preparation of aromatic carboxylic acids  
INVENTOR(S): Fujiwara, Juzo; Takagi, Ken; Taniguchi, Hiroki  
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08245501	A2	19960924	JP 1995-51485	19950310 <-
PRIORITY APPLN. INFO.:			JP 1995-51485	19950310

OTHER SOURCE(S): CASREACT 126:7825

AB The title compds. are prepared by reaction of aromatic compds. with CO in the presence of Pd (in)organic salts, peroxy acid salts and/or O<sub>2</sub>, and haloalkyl carboxylic acids. PhH was treated with CO in the presence of Pd(OAc)<sub>2</sub>, K peroxodisulfate, and CF<sub>3</sub>CO<sub>2</sub>H at 25° for 20 h to give 1400 mol.% (based on Pd) benzoic acid.

IT 100-09-4P, p-Methoxybenzoic acid

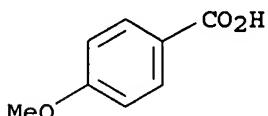
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of aromatic carboxylic acids by oxidative carbonylation of arenes

with Pd compds. and haloalkaonic acids)

RN 100-09-4 CAPLUS

CN Benzoic acid, 4-methoxy- (9CI) (CA INDEX NAME)



L15 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:680252 CAPLUS  
DOCUMENT NUMBER: 115:280252  
TITLE: Palladium carbene cluster: synthesis, structure and reactivity  
AUTHOR(S): Stromnova, T. A.; Busygina, I. N.; Kochubei, D. I.; Moiseev, I. I.

CORPORATE SOURCE: N. S. Kurnakov Inst. Gen. Inorg. Chem., Moscow, 117907, USSR

SOURCE: Journal of Organometallic Chemistry (1991), 417(1-2), 193-204  
CODEN: JORCAI; ISSN: 0022-328X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:280252

AB The first palladium carbene cluster,  $\mu$ -tetrakis(diphenylmethyldene)- $\mu$ -tetraacetato-quadro-tetrapalladium(4Pd-Pd), Pd<sub>4</sub>( $\mu$ -CPh<sub>2</sub>)<sub>4</sub>( $\mu$ -OAc)<sub>4</sub> (I), was prepared by substitution of diphenylcarbene ligands for CO-groups in  $\mu$ -tetrakis(carbonyl)- $\mu$ -tetraacetato-quadro-tetrapalladium(4Pd-Pd), Pd<sub>4</sub>( $\mu$ -CO)<sub>4</sub>( $\mu$ -OAc)<sub>4</sub> (II) and characterized with EXAFS data. Reactivity of I, II

and related clusters is discussed. Thermolysis of the clusters involves inner-sphere oxidation of carbene or carbonyl ligands during which an oxygen atom is transferred from the carboxylate group to the carbene or carbonyl ligand. Thermolysis of carbonyl clusters in benzene or toluene solns. gives the products of CO<sub>2</sub> insertion into the C-H bond of the solvent forming benzoic acid from benzene and a mixture of phenylacetic and tolyl acids from toluene.

IT 25567-10-6P

RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, by thermolysis of palladium carbonyl carboxylate cluster in presence of toluene)

RN 25567-10-6 CAPLUS

CN Benzoic acid, methyl- (9CI) (CA INDEX NAME)



D1-Me

D1-CO<sub>2</sub>H

L15 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:608194 CAPLUS

DOCUMENT NUMBER: 115:208194

TITLE: Thermolysis of tetranuclear palladium clusters: unexpected transfer of oxygen from a carboxylate group to carbene and carbonyl bridging ligands; carbon dioxide insertion into carbon-hydrogen bonds

AUTHOR(S): Stromnova, T. A.; Busygina, I. N.; Tikhonova, N. Yu.; Moiseev, I. I.

CORPORATE SOURCE: N. S. Kurnakov Inst. Gen. Inorg. Chem., Moscow, 117907, USSR

SOURCE: Mendelev Communications (1991), (2), 58-9  
CODEN: MENCEX; ISSN: 0959-9436

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Thermolysis of the tetranuclear palladium clusters [Pd<sub>4</sub>( $\mu$ -Q)<sub>4</sub>( $\mu$ -O<sub>2</sub>CR)<sub>4</sub>] (Q = CPh<sub>2</sub>, CO; R = Me, CMe<sub>3</sub>, Ph, CH<sub>2</sub>Cl, CF<sub>3</sub>) involve inner-sphere oxidation of carbene or carbonyl ligands during which an oxygen atom transfer occurs from the carboxylate group to the carbene or carbonyl ligand; the thermolysis of the carbonyl clusters gives the products of CO<sub>2</sub> insertion into the C-H bond of benzene or toluene used as solvents forming benzoic acid from benzene and a mixture of phenylacetic and tolyl acids from toluene.

IT 25567-10-6P, Toluic acid

RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, by thermolysis of tetranuclear palladium carboxylate cluster in toluene)

RN 25567-10-6 CAPLUS

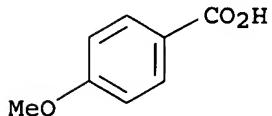
CN Benzoic acid, methyl- (9CI) (CA INDEX NAME)



D1-Me

D1-CO<sub>2</sub>H

L15 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1980:514092 CAPLUS  
DOCUMENT NUMBER: 93:114092  
TITLE: Palladium-promoted one-step carboxylation of aromatic compounds with carbon monoxide  
AUTHOR(S): Fujiwara, Yuzo; Kawauchi, Tomio; Taniguchi, Hiroshi  
CORPORATE SOURCE: Dep. Appl. Chem., Kyushu Univ., Fukuoka, 812, Japan  
SOURCE: Journal of the Chemical Society, Chemical Communications (1980), (5), 220-1  
CODEN: JCCCAT; ISSN: 0022-4936  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB PhR (R = H, Me, Cl, OMe), reacted with CO (20 h, 100°, 15 atm) in the presence of Pd(OAc)<sub>2</sub> as catalyst, giving mixts. of o-, m- and/or p-RC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H. Similar carboxylation of thiophene and furan gave 18% thiophene- and 35% furan-2-carboxylic acid, resp. No oxygen is required in the reactions.  
IT 100-09-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, by palladium-catalyzed carboxylation of anisole)  
RN 100-09-4 CAPLUS  
CN Benzoic acid, 4-methoxy- (9CI) (CA INDEX NAME)



## Refine Search

## Search Results -

Terms	Documents
L5 and p and si and (V or mo or W)	3

**Database:** US PCT Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

## Search History

DATE: Friday, June 30, 2006 [Printable Copy](#) [Create Case](#)

Set Name Query  
side by side

## Hit Count Set Name

*DB=USPT, USOC, EPAB, JPAB, DWPI, TDDBD; PLUR=YES; OP=ADJ;*

<u>L6</u>	L5 and p and si and (V or mo or W)	3	<u>L6</u>
<u>L5</u>	L4 and heteropoly\$9	21	<u>L5</u>
<u>L4</u>	L3 and (palladium or pd)	439	<u>L4</u>
<u>L3</u>	L1 and (carbon monoxide or co)and oxygen	1856	<u>L3</u>
<u>L2</u>	L1 and carbon monoxide and oxygen	187	<u>L2</u>
L1	anisic acid or toluic acid	6208	L1

END OF SEARCH HISTORY

## Hit List

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First Hit	Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS					

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### Search Results - Record(s) 1 through 10 of 21 returned.

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1. Document ID: US 6998491 B2

L5: Entry 1 of 21

File: USPT

Feb 14, 2006

US-PAT-NO: 6998491

DOCUMENT-IDENTIFIER: US 6998491 B2

TITLE: Catalyst comprising a cyclic imide compound

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20020128149 A1

September 12, 2002

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
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2. Document ID: US 6897176 B2

L5: Entry 2 of 21

File: USPT

May 24, 2005

US-PAT-NO: 6897176

DOCUMENT-IDENTIFIER: US 6897176 B2

TITLE: Olefin polymerization catalyst and process for producing olefin polymer with the catalyst

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
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3. Document ID: US 6444843 B1

L5: Entry 3 of 21

File: USPT

Sep 3, 2002

US-PAT-NO: 6444843

DOCUMENT-IDENTIFIER: US 6444843 B1

\*\* See image for Certificate of Correction \*\*

TITLE: Producing method of (hydroxyalkyl) alicyclic carboxylic acids and intermediates for producing the same and producing method of such intermediates

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
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4. Document ID: US 5760288 A

L5: Entry 4 of 21

File: USPT

Jun 2, 1998

US-PAT-NO: 5760288

DOCUMENT-IDENTIFIER: US 5760288 A

TITLE: Process for producing aromatic carboxylic acid

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#) 5. Document ID: US 5723694 A

L5: Entry 5 of 21

File: USPT

Mar 3, 1998

US-PAT-NO: 5723694

DOCUMENT-IDENTIFIER: US 5723694 A

\*\* See image for Certificate of Correction \*\*

TITLE: Process for preparing monomethylated or dimethylated phenols

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#) 6. Document ID: US 5389230 A

L5: Entry 6 of 21

File: USPT

Feb 14, 1995

US-PAT-NO: 5389230

DOCUMENT-IDENTIFIER: US 5389230 A

TITLE: Catalytic hydroconversion process

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#) 7. Document ID: US 5362382 A

L5: Entry 7 of 21

File: USPT

Nov 8, 1994

US-PAT-NO: 5362382

DOCUMENT-IDENTIFIER: US 5362382 A

TITLE: Resid hydrocracking using dispersed metal catalysts

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#) 8. Document ID: US 5336395 A

L5: Entry 8 of 21

File: USPT

Aug 9, 1994

US-PAT-NO: 5336395

DOCUMENT-IDENTIFIER: US 5336395 A

TITLE: Liquefaction of coal with aqueous carbon monoxide pretreatment[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#) 9. Document ID: US 5332489 A

L5: Entry 9 of 21

File: USPT

Jul 26, 1994

US-PAT-NO: 5332489

DOCUMENT-IDENTIFIER: US 5332489 A

TITLE: Hydroconversion process for a carbonaceous material

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#) 10. Document ID: US 5200063 A

L5: Entry 10 of 21

File: USPT

Apr 6, 1993

US-PAT-NO: 5200063

DOCUMENT-IDENTIFIER: US 5200063 A

TITLE: Coal hydroconversion process comprising solvent enhanced pretreatment with carbon monoxide[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#)[Clear](#) | [Generate Collection](#) | [Print](#) | [Fwd Refs](#) | [Blkwd Refs](#) | [Generate OACS](#)

Terms	Documents
L4 and heteropoly\$9	21

Display Format: [-] [Change Format](#)[Previous Page](#)[Next Page](#)[Go to Doc#](#)

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First Hit	Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS					

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### Search Results - Record(s) 11 through 20 of 21 returned.

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11. Document ID: US 5151173 A

L5: Entry 11 of 21

File: USPT

Sep 29, 1992

US-PAT-NO: 5151173

DOCUMENT-IDENTIFIER: US 5151173 A

TITLE: Conversion of coal with promoted carbon monoxide pretreatment

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
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12. Document ID: US 5110450 A

L5: Entry 12 of 21

File: USPT

May 5, 1992

US-PAT-NO: 5110450

DOCUMENT-IDENTIFIER: US 5110450 A

TITLE: Coal extract hydroconversion process comprising solvent enhanced carbon monoxide pretreatment

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
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13. Document ID: US 5071540 A

L5: Entry 13 of 21

File: USPT

Dec 10, 1991

US-PAT-NO: 5071540

DOCUMENT-IDENTIFIER: US 5071540 A

TITLE: Coal hydroconversion process comprising solvent extraction and combined hydroconversion and upgrading

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
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14. Document ID: US 5026475 A

L5: Entry 14 of 21

File: USPT

Jun 25, 1991

US-PAT-NO: 5026475

DOCUMENT-IDENTIFIER: US 5026475 A

TITLE: Coal hydroconversion process comprising solvent extraction (OP-3472)

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

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15. Document ID: US 4357229 A

L5: Entry 15 of 21

File: USPT

Nov 2, 1982

US-PAT-NO: 4357229

DOCUMENT-IDENTIFIER: US 4357229 A

TITLE: Catalysts and hydrocarbon treating processes utilizing the same

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

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16. Document ID: US 4348270 A

L5: Entry 16 of 21

File: USPT

Sep 7, 1982

US-PAT-NO: 4348270

DOCUMENT-IDENTIFIER: US 4348270 A

TITLE: Catalysts and hydrocarbon treating processes utilizing the same

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

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17. Document ID: US 4295996 A

L5: Entry 17 of 21

File: USPT

Oct 20, 1981

US-PAT-NO: 4295996

DOCUMENT-IDENTIFIER: US 4295996 A

TITLE: Catalysts for hydrocarbon treating processes

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

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18. Document ID: US 4295995 A

L5: Entry 18 of 21

File: USPT

Oct 20, 1981

US-PAT-NO: 4295995

DOCUMENT-IDENTIFIER: US 4295995 A

TITLE: Catalysts hydrocarbon treating processes

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Drawn D](#)

19. Document ID: US 4226742 A

L5: Entry 19 of 21

File: USPT

Oct 7, 1980

US-PAT-NO: 4226742

DOCUMENT-IDENTIFIER: US 4226742 A

TITLE: Catalyst for the hydroconversion of heavy hydrocarbons

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#) 20. Document ID: US 4178227 A

L5: Entry 20 of 21

File: USPT

Dec 11, 1979

US-PAT-NO: 4178227

DOCUMENT-IDENTIFIER: US 4178227 A

TITLE: Combination hydroconversion, fluid coking and gasification

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)[Clear](#) | [Generate Collection](#) | [Print](#) | [Fwd Refs](#) | [Bkwd Refs](#) | [Generate OACS](#)

Terms	Documents
L4 and heteropoly\$9	21

Display Format: [-] [Change Format](#)[Previous Page](#)    [Next Page](#)    [Go to Doc#](#)

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Search Results - Record(s) 21 through 21 of 21 returned.

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21. Document ID: US 4134825 A

L5: Entry 21 of 21

File: USPT

Jan 16, 1979

US-PAT-NO: 4134825

DOCUMENT-IDENTIFIER: US 4134825 A

TITLE: Hydroconversion of heavy hydrocarbons

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [Claims](#) [KMC](#) [Drawn D.](#)

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[Clear](#) [Generate Collection](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#) [Generate OACS](#)

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Terms	Documents
L4 and heteropoly\$9	21

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First Hit	<a href="#">Clear</a>	<a href="#">Generate Collection</a>	<a href="#">Print</a>	<a href="#">Fwd Refs</a>	<a href="#">Bkwd Refs</a>	<a href="#">Generate OACS</a>
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**Search Results - Record(s) 1 through 3 of 3 returned.**

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1. Document ID: US 6897176 B2

L6: Entry 1 of 3

File: USPT

May 24, 2005

US-PAT-NO: 6897176

DOCUMENT-IDENTIFIER: US 6897176 B2

TITLE: Olefin polymerization catalyst and process for producing olefin polymer with the catalyst

Full	Title	Citation	Front	Review	Classification	Date	Reference	<a href="#">Sequences</a>	<a href="#">Attachments</a>	Claims	KMIC	Drawn D.
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2. Document ID: US 5760288 A

L6: Entry 2 of 3

File: USPT

Jun 2, 1998

US-PAT-NO: 5760288

DOCUMENT-IDENTIFIER: US 5760288 A

TITLE: Process for producing aromatic carboxylic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	<a href="#">Sequences</a>	<a href="#">Attachments</a>	Claims	KMIC	Drawn D.
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3. Document ID: US 5723694 A

L6: Entry 3 of 3

File: USPT

Mar 3, 1998

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\*\* See image for Certificate of Correction \*\*

TITLE: Process for preparing monomethylated or dimethylated phenols

Full	Title	Citation	Front	Review	Classification	Date	Reference	<a href="#">Sequences</a>	<a href="#">Attachments</a>	Claims	KMIC	Drawn D.
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